IN THE CLAIMS

Please amend the claims as follows

8. (Twice Amended) A method of forming a device structure that combines insulating materials for alignments posts and optical interference layers associated with an active device structure in a silicon body comprising:

providing a silicon wafer having a pattern of active device structures therein and thereon;

forming a first metallic layer over the surface of said wafer;

forming a second metallic layer over said first metallic layer, which is used both for connections and for bonding pads;

forming a silicon dioxide insulation over said second metallic layer;

forming a third metallic layer over said layer of silicon dioxide;

forming a photoresist mask over said third metallic layer having a covering over planned pixel locations of said liquid-crystal-on-silicon display device;

removing said third metallic layer not covered by said photoresist mask, forming said alignment posts whereby said

F2

alignment post are formed by the process of amorphous silicon by plasma etching upon said silicon substrate;

E1 end

removing said photoresist mask to provide that each said pixel retains said third metallic layer, which shall act as a mirror reflector for light incident upon said liquid-crystal-on-silicon display device; and

depositing optical interference layers of silicon oxide or silicon nitride or silicon oxide or silicon nitride over said third metallic layer and said silicon dioxide layer.

9. Please cancel claim 9.

10. Please cancel claim 10.

11. Please cancel claim 11.

12. Please cancel claim 12.

13. Please cancel claim 13.

F2 E2

14. (Amended) The method of claim 8 for forming an amorphous silicon layer of thickness between about 0.1 and 5 microns to achieve the desired height of the alignment posts.

F2

15. (Twice Amended) The method of claim 8 for forming a photoresist mask over said amorphous silicon layer to cover the location of each planned alignment post.

E2 end

16. (Twice Amended) The method of claim 8 for removing said amorphous silicon to form said alignment posts by plasma etch, and removing said photoresist mask.

17. Please cancel claim 17.

F2

18. (Amended) The method of claim 38 for forming a PECVD oxide layer of thickness between 0. 1 and 5 microns to achieve the desired height of the alignment posts.

E3

19. (Twice Amended) The method of claim 38 for forming a photoresist mask over said PECVD oxide layer to expose the location of each planned alignment post.

20. (Twice Amended) The method of claim 38 for forming post cavities by plasma etching of said PECVD oxide layer.

21. (Twice Amended) The method of claim 38 for plasma enhanced chemical vapor deposition of silicon nitride into said post cavities.

22. (Thrice Amended) The method of claim 38 for etch-back removal of said silicon nitride, except that silicon nitride deposited in said post cavities.

23. (Twice Amended) The method of claim 38 for removing the PECVD oxide layer by wet etch (such as HF or buffered HF) to form said silicon nitride alignment posts, and removing said photoresist mask.

24. Please cancel claim 24.

25. (Amended) The method of claim 39 wherein a photoresist or PMMA acylic layer of thickness between about 1 and 5 microns is deposited upon the OIL and covered by silicon monoxide via thermal evaporation, followed by another photoresist layer of thickness between about 0.1 and 1 micron.

26. (Twice Amended) The method of claim 39 wherein a photomask is used to form said cavities in said silicon monoxide by a CF4 plasma etching of the silicon monoxide, after which the silicon monoxide serves as a mask for an oxygen plasma etching of said two-micron bottom photoresist.

27. (Amended) The method of claim 39 for forming an insulation material by plug filling the cavities formed in the silicon monoxide and two-micron bottom photoresist layer; several insulation materials are available from which to choose, including calcium fluoride, silicon monoxide, yttrium oxide, and aluminum oxide, and the like.

28. (Twice Amended) The method of claim 39 for removing said bottom photoresist layer by lift-off with an ultrasonic bath, leaving said alignment posts.

29. Please cancel claim 29.

30. (Amended) The method of claim 40 for forming a photosensitive polyimide layer of thickness between about 0.1 and 5 microns posts to achieve the desired height of the alignment posts.

31. (Twice Amended) The method of claim 40 for exposing said photosensitive polyimide at the location of each planned alignment post.

32. (Twice Amended) The method of claim 40 for developing and removing said photosensitive polyimide to leave said alignment

posts in the location of the exposed polyimide described herein, and removing said photoresist mask.

Please enter the following new claims:

38. A method of forming a device structure that combines insulating materials for alignments posts and optical interference layers associated with an active device structure in a silicon body comprising:

providing a silicon wafer having a pattern of active device structures therein and thereon;

forming a first metallic layer over the surface of said wafer;

forming a second metallic layer over said first metallic layer, which is used both for connections and for bonding pads;

forming a silicon dioxide insulation over said second metallic layer;

forming a third metallic layer over said layer of silicon dioxide;

forming a photoresist mask over said third metallic layer having a covering over planned pixel locations of said liquid-crystal-on-silicon display device;

removing said third metallic layer not covered by said photoresist mask, forming said alignment posts by the process of silicon nitride by plug filling upon the silicon substrate;

removing said photoresist mask to provide that each said pixel retains said third metallic layer, which shall act as a mirror reflector for light incident upon said liquid-crystal-on-silicon display device; and

depositing optical interference layers of silicon oxide or silicon nitride or silicon oxide or silicon nitride over said third metallic layer and said silicon dioxide layer.

39. A method of forming a device structure that combines insulating materials for alignments posts and optical interference layers associated with an active device structure in a silicon body comprising:

providing a silicon wafer having a pattern of active device structures therein and thereon;

forming a first metallic layer over the surface of said wafer;

forming a second metallic layer over said first metallic layer, which is used both for connections and for bonding pads;

forming a silicon dioxide insulation over said second metallic layer;

forming a third metallic layer over said layer of silicon dioxide;

forming a photoresist mask over said third metallic layer having a covering over planned pixel locations of said liquid-crystal-on-silicon display device;

removing said third metallic layer not covered by said photoresist mask, forming said alignment post by the process of insulation material by lift-off upon said optical interference layer OIL;

removing said photoresist mask to provide that each said pixel retains said third metallic layer, which shall act as a mirror reflector for light incident upon said liquid-crystal-on-silicon display device; and

depositing optical interference layers of silicon oxide or silicon nitride or silicon oxide or silicon nitride over said third metallic layer and said silicon dioxide layer.

40. A method of forming a device structure that combines insulating materials for alignments posts and optical interference layers associated with an active device structure in a silicon body comprising:

providing a silicon wafer having a pattern of active device structures therein and thereon;

forming a first metallic layer over the surface of said wafer;

forming a second metallic layer over said first metallic layer, which is used both for connections and for bonding pads;

forming a silicon dioxide insulation over said second metallic layer;

forming a third metallic layer over said layer of silicon dioxide;

forming a photoresist mask over said third metallic layer having a covering over planned pixel locations of said liquid-crystal-on-silicon display device;

removing said third metallic layer not covered by said photoresist mask, forming said alignment post by a process of polyimide by photosensitive etching upon an Optical Interference Layer (OIL);

removing said photoresist mask to provide that each said pixel retains said third metallic layer, which shall act as a mirror reflector for light incident upon said liquid-crystal-on-silicon display device; and

depositing optical interference layers of silicon oxide or silicon nitride or silicon oxide or silicon nitride over said third metallic layer and said silicon dioxide layer.